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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/829,419	04/21/2004	Christoph Moelle	2133.013USX	9121

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EXAMINER
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BLACKWELL, GWENDOLYN ANNETTE

ART UNIT	PAPER NUMBER
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1775

MAIL DATE	DELIVERY MODE
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08/24/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/829,419

Applicant(s)

MOELLE ET AL.

Examiner

Gwendolyn Blackwell

Art Unit

1775

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 May 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5-69, 76 and 77 is/are pending in the application.
- 4a) Of the above claim(s) 76 and 77 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 36, 44, 45, 68 and 69 is/are allowed.
- 6) ☒ Claim(s) 1, 5-35, 37-43 and 46-67 is/are rejected.
- 7) ☒ Claim(s) 2 and 3 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 August 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION*****Claim Objections***

1. Claims 5, 8-13, 37-41, 43, and 56-58 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Newly amended claim 1 requires that the functional layer comprises at least one chloride and at least one further element selected from the group consisting of an oxide, a nitride, a carbide, a selenide, a telluride, and a sulfide. The aforementioned claims fail to further limit the parent claim as each claim either claims one functional layer by listing a Markush group of elements, lists a mixed system that does not incorporate the chloride element of the layer, and/or indicates that the functional layer is made from a metal. Correction is required.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

*The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.*

3. Claims 26-35, 42, and 66-67 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for oxides (pages 15-23, lines 15-25), does not reasonably provide enablement for an optical functional layer comprised of at least one chloride and at least one elements selected from the group consisting of an oxide, a nitride, a carbide, a selenide, a telluride, and a sulfide. The specification does not enable any person skilled in the art to which it

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pertains, or with which it is most nearly connected, to make the invention commensurate in scope with these claims. Applicant has indicated in the specification, (pages 15-23, lines 15-25), that oxides are mainly used for the functional optical film. It is unclear how Applicant is enabled for the a functional optical film comprised of at least one chloride with an additional material. Optical functional films require certain characteristics which Applicant has not shown to be present with the requirements of claim 1. One skilled in the art at the time of invention would not be readily able from the specification to determine the proper chloride and additional element without undue experimentation. While it is well known in the optical art to use oxides and/or nitrides as materials in optical functional films based upon the desired end result, it is not clear how to create a combination that would result in a feasible functional optical film based upon the makeup of claim 1. Clarification is required.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

*The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.*

5. Claims 5, 8-13, 37-41, 43, and 56-58 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 5, 8-13, 37-41, 43, and 56-58 are indefinite as the claims do not limit the parent claim. The parent claim requires a functional layer comprising at least one chloride and at least one further element selected from the group consisting of an oxide, a nitride, a carbide, a selenide, a telluride, and a sulfide. The aforementioned claims do not require the at least one

chloride in addition to the other material. It is unclear from claims 5, 8-13, 37-40, 43, and 56-58 the composition of the functional film. Clarification is required.

### ***Double Patenting***

6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Claims 1, 5-35, 46-65, and 68 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-24 of copending Application No. 10/527,520. Although the conflicting claims are not identical, they are not patentably distinct from each other because the functional/protective layer of the present invention encompasses the protective layer of the copending application in view of the layer structure, the materials used for the layer and the thickness of the interlayer.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

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8. Claims 1, 5-35, 46-65, and 68 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-37 of U.S. Patent no. 7,018,727. Although the conflicting claims are not identical, they are not patentably distinct from each other because the functional/protective layer of the present invention encompasses the protective layer of the patent claims in view of the layer structure, the materials used for the layer and the thickness of the interlayer.

#### ***Response to Arguments***

9. Applicant's arguments, see pages 15-17, filed May 24, 2007, with respect to the rejection(s) of claim(s) 1-3, 5-35, 37-43, 46-48, 52-60, and 66-68 under 35 USC 102 and/or 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made as set forth above.

10. Although Applicant indicated that Terminal Disclaimer was filed to obviate the Obvious-Type Double Patenting rejection, a copy of said filed Terminal Disclaimer is not present in the file. Please resubmit. Until received, the Double Patenting rejection will be maintained.

#### ***Allowable Subject Matter***

11. Claims 36, 44-45, and 68-69 are allowed over the prior art of record. While it is generally known to use an interlayer interrupt the morphology of a first and second coating, the prior art of record does not teach or suggest the use of such an interlayer in combination with the interlayer and the first and second coating having a specific compositional limitation in relation to one another.

*Conclusion*

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

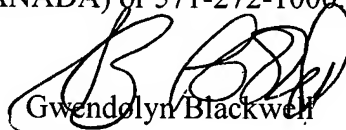
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gwendolyn Blackwell whose telephone number is (571) 272-1533. The examiner can normally be reached on Monday - Thursday; 6:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jennifer McNeil can be reached on (571) 272-1540. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Gwendolyn Blackwell  
Examiner  
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